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TRANSLATIONS ON USSR MILITARY AFFAIRS
(FOUO 7/79)









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COMMENTS ON CHINA'S ANTI-SOVIET COURSE

Moscow ZARUBEZHNOYE VOYENNOYE OBOZRENIYE in Russian No 10, Oct 78 signed to press 5 Oct 78 pp 23-28

[Article by Col Yu. Petrov: "China — in Alliance with the Reactionaries"]

[Text] It was observed at the 25th Congress of the Communist Party of the Soviet Union that the policy of the current leaders of China is openly directed against the majority of the socialist states. "Furthermore," General Secretary of the CPSU Central Committee Comrade L. I. Brezhnev said in the Accountability Report of the Central Committee to the party congress, "it stands right alongside the position of the most extreme reactionaries in the world, from the militarists and enemies of detente in the Western countries to the racists of South Africa and the fascist rulers of Chile. This policy is not only completely devoid of socialist principles and ideals; in actuality it has become an important reserve for imperialism in its struggle against socialism."

Beijing's feverish attempts to stop detente, prevent disarmament, and sow mistrust and hostility among different states and its endeavors to provoke a world war and itself come out ahead present a great danger to all peace-loving peoples.

The Beijing leaders use the Maoist notion of "three worlds" as the theoretical substantiation of their foreign policy activities. This conception was first proclaimed in 1974, but since then it has been somewhat revised, above all to strengthen its anti-Soviet orientation. According to this idea all the countries, regardless of their social orders, are divided into "three worlds." In the first the Beijing "theoreticians" put the "superpowers": the USSR and the United States. The second is the industrially developed countries (both capitalist and socialist), and the third, of which Beijing claims leadership, is all the developing countries, including those with the most reactionary, anticommunist regimes.

The purpose of the idea of "three worlds" in its current form is to justify the policy followed by the Maoist leadership of total hostility

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to the Soviet Union. This idea is intended to unify the reactionary forces to create an international anti-Soviet front. The Chinese leaders formally proclaim the necessity of creating a front for the struggle against the two "super powers," but in reality this "struggle against hegemony" has an openly anti-Soviet character.

While aligning itself with the imperialist states, Beijing not only calls on them to unite against the "enemy," which is the USSR and the other socialist countries, but even tries to use them to build up its own military-economic potential.

The Beijing leaders, while following their anti-Soviet policy, have adopted a primary line of rapprochemant with the United States. They say that Beijing and Washington have many "common" and "parallel" interests. Hua Guofeng and other Chinese leaders essentially agree with those openly imperialistic aspects of U. S. policy which prevent the alleviation of international tension, promote the arms race, and maintain the U. S. military hegemony in Western Europe and certain regions of Asia.

"The Beijing leadership insists on maintaining an American military presence in Asia," American professor S. Spector, who visited China, reported. "The Chinese leadership is demanding that U. S. Armed Forces stay in South Korea and Japan. China favors keeping and enlarging U. S. naval forces in the western part of the Pacific and in the Indian Ocean. China does not want the United States to withdraw from Southeast Asia." They justify this position with references to the supposed Soviet threat. On many international issues discussed at the United Nations, Beijing forms a bloc with Washington. It is also common knowledge that the former U. S. Secretary of State Schlesinger and former naval chief Zumwalt, who are died-in-the-wool opponents of detente and represent the interests of the military-industrial complex, were received with great pomp in Beijing.

A mutual search continues for channels of military-technical cooperation between the PRC and militarist circles in the United States. In this connection, the press in many countries has called attention to the recent trip to China of an American government delegation led by F. Press, the U. S. president's advisor for science and technology. The Japanese newspaper SANKYOI SHIMBUN reported that this delegation conducted talks about supplying China with equipment for military and spy satellites and various electronic equipment which could be used for military purposes. Beijing, the newspaper observed, is trying to receive military-technical documents from the United States, including documents on missile building.

According to reports in the foreign press, the U. S. Government is removing one limitation after another on the export to China of those types of modern technological equipment that can be used for military purposes. The administration in Washington has become particularly active in reviewing the question of relaxing checks on exports to the PRC after the trip to Beijing by presidential advisor for national security Z. Brzezinski and his talk with the Feijing leaders.

Representatives of American imperialist circles are counting on China's deep-seated anti-Sovietism. "China has become an ally of the United States. The Beijing leadership is promoting a stronger NATO and supporting American diplomacy in a number of problems, beginning with the Middle East and ending with South Asia," wrote R. Solomon, one of Brzezinski's assistants, in the journal FOREIGN AFFAIRS. Beijing is making great efforts by various means to slow down or completely prevent the Soviet Union and the United States from reaching agreement on the issues of detente, limitation of strategic offensive weapons, and other matters of great international importance for strengthening peace throughout the world.

While maintaining a policy hostile to the Soviet Union and the socialist countries, the Chinese leaders have undertaken a rapprochemant with the Western European members of NATO on questions of military-political cooperation and conducting joint actions against the peace-loving policy of the USSR and the other socialist countries. Under the pretext of strengthening "general security" from a supposedly growing threat by the Warsaw Pact Organization, Beijing encourages war preparations and the arms race in the NATO countries. To established its first contacts with the headquarters of this imperialist bloc as early as 1975.

The European NATO country with whom the PRC is developing relations most actively is West Germany, and it shows special sympathy for the reactionary forces. Supporting the revanchiste aspirations of the West German "rightists," Beijing expressed its sympathy with them
"in connection with the splitting of the German nation" and demonstrated approval for their demands for its "reunification." It is perfectly clear, writes ZYCIE WARSZAWY that when China speaks of unification it "has in mind not only absorption of the independent German state, the German Democratic Republic, by the Federal Republic of Germany, but also restoration of the 1937 borders of the 'Third Reich.'" This is also confirmed by the statement made by the Chinese leaders to the delegation from the West German television company ZDV, which came to the PRC in September 1977 at the invitation of Beijing Radio. The statement says that China "considers Berlin a constituent part of the Federal Republic without any restrictions." The Beijing leaders support all attempts by reactionary imperialist forces to thwart the four-power agreement on West Berlin and thus make this city a dangerous crisis point once again.

Placing its hopes in Western Europe on extremely reactionary politicians, Beijing accepts representatives of the English Conservatives with open arms. Thus, Mrs. Thatcher, the leader of the British Conservatives, was received in Beijing like a head of state. The main reason for this was that in her statements in China she harshly attacked the foreign policy of the Soviet Union and all the countries of the socialist community. Therefore, Deputy Premier Li Xiannian, in conversation with Mrs. Thatcher, found "a good deal in common" in their assessments of various important international issues. Both the Chinese leaders and the leader of the English Tories show a desire to oppose the policy of detente, which, in their opinion, "is beneath mention." The anti-Sovietism of Chief Air Marshal Cameron, chief of

defense headquarters for Great Britain, and Lord Chalfont were also greeted with great satisfaction in Beijing.

It is emphasized abroad that, while calling for allout strengthening of the NATO bloc, the Chinese leaders attach great importance to reactivating French ties with the NATO military organization. Supporting the propaganda campaign developed in France concerning the "threat" from the socialist countries, the Chinese press welcomed the new military idea called "expanded zones of responsibility," which envisioned immediate introduction of French armed forces into action if a conflict occurs between the NATO countries and the members of the Warsaw Pact. A Chinese military delegation headed by deputy chief of the general staff Yang Chengwu visited France.

According to the testimony of the French press, the Chinese delegation showed particular interest in various types of missiles, airplanes, and other modern military equipment. A PRC representative stated that China is counting on French help to modernize its armed forces. In its turn, France demonstrated an interest in further expansion of bilateral military cooperation, which began in 1972.

The expansion of political contacts with Western Europe and intensification of the campaign to discredit the policy of detente were accompanied of activation of Beijing's links with the European Economic Community. In April of this year the "Common Market" granted China the status of most favored nation. In the words of a representative of this organization, the agreement with China does not envision any restrictions on sale of strategic materials.

The Chinese leaders, following a policy of militarization of the country and modernization of the armed forces, are looking for ways to buy military equipment and weapons in the West. According to a report by the DPA Agency, Beijing emissaries in West Germany intend to buy a license from the Messerschmitt-Boelkow-Blohm Company for the production of heavy helicopters. In 1975 a major deal was concluded with the English Rolls Royce Company for the purchase of Spay jet aircraft engines and to grant China a license to manufacture engines of this type. China has purchased Alouette and Super Frelon helicopters from France.

The Beijing leaders, just like the bosses of the NATO bloc, are urging the capitalist countries of Western Europe to increase their military expenditures. They support escalation of the arms race. In their desire to win favor with imperialism the Beijing leaders have gone even further than the Washington "hawks" and NATO militarists in their praise of the neutron bomb, whose production is resolutely opposed by the peace-loving peoples of the entire world.

Beijing's servility before the world imperialist reactionaries has recently become highly cynical and flagrant. Today the Chinese leaders not only support NATO by every means but directly identify China with this agressive bloc. Answering questions from American journalists, deputy

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premier of the PRC State Council Deng Xiaoping stated that he basically agreed with the opinion of the U.S. Ambassador to Japan that China is an "Eastern NATO" and hinted at the necessity of the three countries, the United States, Japan, and China, taking joint action in the Far East against the "Soviet threat."

The Swedish newspaper NORSHENSFALAMAN pointed out, in this connection, that the NATO leadership has every reason to be more than satisfied with the actions of the current Beijing leaders. In top NATO circles Maoist China is even called the "16th NATO member." and given the role of a kind of "Far Eastern flank" of this reactionary organization.

Beijing's ties with NATO, the Finnish newspaper KANSAN UUTISET remarked, are becoming more active every year. Therefore we are fully justified in saying that, if it is not a matter of a military alliance yet, in any case the policies of China and the NATO countries are moving in a common direction.

The NATO countries are not the only objects of the fixed attention of the Beijing strategists. In their attempt to forge an anti-Soviet front the leaders of China also direct their gaze to the East. By using flagrant pressure and blackmail and playing on the nationalism of reactionary Japanese circles, Beijing was able to get Japan to sign the socalled "treaty of peace and friendship." It has an anti-Soviet orientation, which has been mentioned more than once by the Beijing leaders themselves. China's line in relation to Japan aims at supporting the forces in that country who stand for militarization and revenge. Deputy premier of the PRC State Council Deng Xiaoping openly praised Japan last October for building up its military strength. Trips to Japan by Chinese figures who always visit the northern regions of the country and make anti-Soviet statements while there are used to stir up revanchiste claims against the Soviet Union. In this way Beijing is clearly claiming a right to use the Chinese-Japanese treaty for its own far-reaching plans and hegemonistic purposes and to involve Japan in actions that endanger the cause of peace.

The Singapore STRAITS TIMES and the English DAILY TELEGRAPH point out in their comments that "it is impossible to very the possibility that the Japanese-Chinese treaty could grow into an alliance of the United States, the PRC, and Japan." U. S. Assistant Secretary of State Holbrook spoke even more openly. He said, in the Hawaiian Islands in June 1978, that Japan and the PRC were the bulwark of U.S. Asian policy. According to the reports by the Japanese paper SANKYOI SHIMBUN, Holbrook also emphasized that the United States, China, and Japan have common interests on the level of maintaining stability in Asia and thus hinted at the possibility of an American-Chinese-Japanese pact to prevent Soviet penetration into Asia.

The formation of such a bloc would, according to the thinking of opponents of the alleviation of international tension, make it possible to put together Japan with its highly developed economy and military potential and China, which has enormous human resources and reserves of strategic raw materials.

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By following its anti-Soviet line in the international arena, Beijing is in fact betraying the interests of the national liberation movement in Asia, Africa, and Latin America and joining with the most reactionary forces of imperialism and the internal reactionaries in the countries of these regions. China now considers the forces that receive support from the Soviet Union and the socialist countries to be its bitter enemies.

China's joint actions with imperialism to suppress the national liberation movement are no longer isolated cases, but rather an established line of foreign policy activities.

Beijing has betrayed the anti-imperialist movement in Chile and, like the United States, supports the fascist Pinochet regime.

The Chinese leadership opposed the national liberation movement in Angola. Together with the United States it supported the sectarian, proimperialist grouping which fought then and still fights alongside the South African racists against the revolutionary government of Angola.

The events in Zaire are one more example of Beijing's alliance with reaction and imperialism. After the NATC countries intervened, a delegation from the PRC headed by deputy chief of the general staff Chi Haotian visited Kinshasa. During the visit China promised to deliver a new batch weapons and military equipment to the Mobutu regime. One item promised was patrol boats. As the AP reported, China also offered to send military advisors to Zaire.

The leadership of China covered itself with shame during the events in the Horn of Africa. It took part in an attempt to strike down the young socialist Ethiopia and, together with the United States, approved of the aggressive actions taken by the Government of Somali. The Chinese did not limit themselves to verbal support either, but with the NATO countries shipped military goods to the Barre government. According to the English DAILY TELEGRAPH, the weapons sent to Somali by China included ground-to-air missiles.

Beijing tried to cover up its aid to the Somali leaders by slandering the Soviet Union, which was supposedly preparing to "seize" the African countries one after the other. "However, Beijing's pseudorevolutionary phrases," the Hungarian newspaper MAGYAR HIRLAP wrote in this connection, "cannot conceal the regrettable fact that the Chinese leaders are acting in alliance with international reactionaries against progressive forces."

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The policies of the Beijing leadership with respect to the national liberation struggle against Israeli and their support of the proimperialist line and capitulationist policy of Sadat also illustrate Beijing's betrayal.

The events on the Indochinese Peninsula are striking evidence of the hegemonistic, expansionist aspirations of the Chinese leadership. With

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the assistance of Kampuchea, Beijing delivered a stab in the back to socialist Vietnam, which had only recently concluded the hard but victorious war against American agression and begun peaceful building. Beijing provided substantial material and military aid to Kampuchea and pressured it to go to war against the Socialist Republic of Vietnam. At the same time China is trying to put economic and political pressure on Vietnam to stop socialist building in that country. The flagrant betrayal of the heroic Vietnamese people by Beijing not only arouses the indignation of all progressive people in the world but also opens the eyes of many to the true content of the policy of the Chinese leadership, whose centerpiece is a desire for world hegemony and a frank orientation, as emphasized in the foreign press, toward seizure of vast areas of neighboring states.

In its relations with China, the Soviet Government holds firmly to the principles of equality, respect for sovereignty and territorial integrity, nonintervention in the domestic affairs of others, and rejection of the use of force. However, all the Soviet Union's initiatives to re-establish good neighbor relations have either been rejected by Beijing or left unanswered. For its part, the Chinese leadership is directing all its efforts to artifically stirring up anti-Sovietism and takes every opportunity to demonstrate its hostility to the USSR. In response to the message of the Presidium of the USSR Supreme Soviet addressed to the Permanent Committee of the All-Chinese Assembly of People's Representatives on 24 February 1978 proposing to normalize Soviet-Chinese relations, the Beijing leaership began a new campaign of slander against our country.

At the same time Map's heirs are continuing a line aimed at thwarting the peace-loving efforts of the Soviet union and the other socialist countries, a policy that favors continuation of the arms race and pushing the world toward another war. This Beijing policy profoundly contradicts the interests of all peoples and demands that the Soviet people show high vigilance toward the tricks and ruses of the Chinese militarists.

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COMMENTS OF NIGHT OPERATIONS OF NATO MCTORIZED INFANTRY COMPANIES

Moscow ZARUBEZHNOYE VOYENNOYE OBOZRENIYE in Russian No 10, Oct 78 signed to press 5 Oct 78 pp 36-41

[Article by Col A. Kol'tsov: "The Company in Night Battle"]

[Text] Despite the desires of the world's people for establishment of lasting peace on earth, militarists in the United States are drawing up new plans to increase their military might and training troops to wage aggressive actions at any point on the globe under any conditions.

In recent times a great deal of attention in the foreign military press and in new regulations and manuals of the armies of the principal capitalist countries has been devoted to the problem of waging combat actions at night. The primary reason for this is that, with the appearance of new weapons, night no longer causes a decrease in the level of combat action. Thus, U. S. Army manuals state directly that modern night vision instruments allow ground forces to wage combat actions under any conditions, deliver accurate fire strikes, organize cooperation and control, and provide support to large and small units at night in practically the same fashion as during the day.

However, the use of night vision instruments cannot, in the opinion of foreign specialists, eliminate all the difficulties that arise in connection with the physiological and psychological characteristics of the human organism. At might the human being has a heightened susceptibility to fatigue and aural and light signals, the outlines and dimensions of objects, and distances are perceived in distorted form. As a result, a faeling of uncertainty and even fear arises, the reaction to danger is diminished, the nervous system relaxes, and, fighting effectiveness is lowered. Therefore, Western military specialists believe that victory in night battle will go to the side that is best equipped and trained for actions in conditions of complete darkness and poor visibility. In their opinion, this training will achieve its purpose if it is carried on systematically at night using the latest night vision instruments and illumination equipment.

They believe that night battle is usually a continuation of daytime battle. Therefore, the units and subunits will be forced to operate in darkness not only on unfamiliar terrain but also in an unclear situation, where the commanders do not have time to organize the battle. Subunit maneuvers must be as simple as possible, and their actions will be more independent.

Success in this type of fighting, the foreign press emphasizes, depends greatly on the unity of the subunits, their ability to orient themselves and keep to assigned directions. For example, a motorized infantry company will usually attack on foot, overcoming the enemy defense in unfamiliar terrain, and it may encounter various manmade and natural obstacles. Performance of the combat mission will depend greatly on skillful battle leadership by NCO's, the determination and teamwork of the platoons and squads, their orientation skills, and skillful use of night vision instruments and means of illumination.

In some cases when the enemy antitank defense is comparatively weak or has been reliably neutralized, a motorized infantry company attacks the enemy in combat vehicles. When this attack procedure is used, it is recommended that before the night battle the company commander carefully study the terrain and choose a sector for the breakthrough which does not have any insurmountable obstacles. All the combat vehicles should be equipped with night vision instruments and the drivers must be trained for actions at night,

The troops should prepare themselves and go onto the attack secretly. If it is impossible to achieve surprise, the attack is carried out with illumination of the terrain; it is recommended that first of all the enemy be blinded and his night vision instruments knocked out. Illumination equipment should be used continuously and evenly. The illumination is distributed both in time and by place in the battle formation of the forward platoons of the company. In this case, just as in daytime, there are artillery preparations, passages are made through minefields and other engineering obstructions, and the attack is carried out with support from tanks, infantry combat vehicles, and sometimes also fire support helicopters.

The success of night battle depends greatly on choosing the correct axis of attack. To do this, specialists believe, it is essential not only to completely uncover the enemy's defense, but also to study the possibilities of a concealed approach to the line of attack using woods, brush, and folds in the terrain, considering that the enemy also has modern night vision instruments.

The company commander carefully analyzes all information from reconnaissance and personal observation and then outlines the sector of the breakthrough, the primary axis of attack, and concealed approaches to the line of attack. With supporting artillery he coordinates the lines for opening and transferring fire and the targets that are to be neutralized immediately. He organizes cooperation with neighbors and gives missions to his own platoons. The company commander may

plan to lay down smoke which will obstruct enemy observation and aimed fire. It is recommended that the smoke be laid down on call so that it will not obstruct the actions of the attacking subunits.

When the company begins moving toward the line of attack, the artillery should be firing at normal intensity, that is, as it has done on previous nights. It is a good idea, specialists feel, to organize flanking fire by neighbors against targets in the axis of the company's attack. When the platoons reach the line of attack, the artillery concentrates its fire on the objects to be seized. As the attackers advance fire is transferred deeper to cut off the path of retreat and mortars and antitank guided missiles continue to fire at fire points that have not been suppressed and are obstructing the platoons' attack.

The foreign press emphasizes that artillery support for an attack at night involves great difficulties because the targets are invisible and correction of fire by shell explosions is extremely complex. It is extremely complex. It is recommended, therefore, that all targets and lines be ranged as much as possible during daylight hours and fire at night be waged according to pre-agreed signals given by the forward lire of the attacking company. Combat engineers must prepare a passage when a company attacking at night crosses a mine field. The company commander, who is in the front line with the control group, secretly advances to the predetermined attack line with two platoons. Then these platoons, with combat engineer support, cross the minefield along the passage and make a breakthrough in a narrow sector. After this one of the platoons races to the depth of the enemy defense, wiping out command posts and communications equipment first of all, while the other, providing fire cover, brings the third platoon through the passage and continues to advance.

During the battle the company commander gives the signal to use illumination rockets. At this time division artillery begins execution of its missions to illuminate targets in the depth of the enemy defense, devoting special attention to the routes of movement of enemy second echelons and reserves. Battalion artillery usually does not take part in illumination of the terrain, so that it will not be diverted from its immediate missions of support for the attacking companies.

As definite lines and objects are taken it is recommended that the subunits immediately secure their defense. To do this they quickly send an outpost ahead, organize cooperation, and begin setting up a system of fire and digging trenches. The artillery is given the mission of laying down concentrated fire in front of the company defense sector. Cooperation with neighbors is organized and mines may also be laid in the directions of greatest tank danger. Specialists believe that the success of night attack depends greatly on holding on to captured objects.

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Precise control and cooperation become especially important in night fighting. The company commander much show great initiative and independence. He makes all decisions quickly and immediately puts them into effect. Radio, light signals, whistles, bugles, and the like are used for communication with platoon leaders and supporting subunits. Special attention is devoted to precise designation of the axis of attack and lines for opening fire and transferring fire; mutual recognition is also important.

Night battle, as the foreign press observes, demands special troop training. In many armies of the NATO bloc, therefore, up to one-third of training time is nighttime. Night actions are a key element of combined arms exercises. Because the units are saturated with the latest night vision instruments and illumination devices, higher demands are made of personnel. In general they are the following: acquire solid skills in night orientation and keeping an assigned direction, learn to use night vision instruments and illumination devices, and be able to move silently and conceal oneself reliably.

Foreign military specialists recommend that troops be prepared for night actions in stages. First, they believe, personnel must be taught to perform the simplest duties at night, then gradually training moves on to the skills of using the weapons and night vision instruments, as well as simple tactical procedures, engineering jobs, and, finally, executing marches. At first marches are across familiar terrain, but later they will be on unfamiliar terrain. The concluding stage is considered to be waging practice combat actions at night at the range, firing the regular weapon and using night vision instruments.

To give subunits more effective training in actions at night, foreign specialists propose that specially prepared sectors (wooded, swampy, and others) be set up in the field to allow troops to be trained in silent, rapid assembly in definite regions, concealed approach to the enemy, opening fire on the enemy from short range, and also secretly filtering through the enemy battle formation.

Commander training, the foreign press observes, should include the questions of planning night battle, control, cooperation, combat support, and use of night vision instruments and illumination and signalling devices. It is recommended that training periods with commanders be held on unfamiliar terrain at night, with a rapidly changing situation. The primary purpose of such training periods is to instill solid skills in controlling subunits in night battle.

The study of night vision instruments is assigned an important place in the system of combat training. The armies of the main capitalist countries, above all the U. S. Army, are receiving more and more new models. During the U. S. aggression in Vietnam the troops used primarily radar and infrared instruments; in the mid-1960's subunits

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began to receive light-intensifying instruments, and by the mid-1970's they were getting heat vision devices built on the principle of intensifying heat emissions.

Modern non-intensifying electronic-optical instruments (for example binoculars and sights) do not require any special training to use. They are less cumbersome and simpler to operate. Their range of action on a starlit (moonlit) night is about 2,000 m. Similar instruments have also been devised for the drivers of combat vehicles and can be used to drive at night. But they all require at least minimal illumination, and it is hard to use them in heavy rain, snow, fog, or smoke.

Heat-vision devices are, in the opinion of foreign specialists, the most promising. They work on the principle of receiving an image by means of fixing the heat contrast between objects, their particular elements, and the surrounding background. These instruments do not give out emissions and need no illumination or light intensification. Their range of action in darkness or with limited visibility is roughly equivalent to the effective range of the rifle. With these instruments it is possible not only to fix targets and determine the distance to them but also to see the outlines of equipment and personnel distinctly in the form of glowing silhouettes against the dark background of the environment. The difficulty with them is that they are heavy and cumbersome, as well as expensive and difficult to produce and use.

Equipping units with modern night vision instruments, teaching personnel to operate in darkness, and the development of night fighting tactics by subunits are evidence that the ground forces of the countries of the aggressive NATO bloc are preparing extensively to wage combat actions at night.

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COMMENTS ON U. S. FLIGHT TRAINING SIMULATORS AND METHODS

Moscow ZARUBEZHNOYE VOYENNOYE OBOZRENIYE in Russian No 10, Oct 78 signed to press 5 Oct 78 pp 52-58

[Article by Col (Ret) G. Osipov, candidate of military sciences and docent, and Capt N. Kolesnikov: "The Use of Trainers to Prepare American Air Force Flight Personnel"]

[Excerpt] One of the important measures to strengthen American military aviation, in addition to supplying it with the latest aviation equipment, is to improve the flight training of the crews. As the foreign press reports, trainers have been used more and more widely in recent years in flight training in the U. S. Air Force, naval aviation, and army aviation. Trainers are used to improve quality, reduce the time and costs of crew preparation, and cut the accident rate in line units.

Foreign military specialists believe that an improvement in crew training can be achieved through simulation and practicing all stages of flight on trainers. This, in turn, makes it possible to teach personnel the skills of controlling the aircraft and its weapons and to maintain these skills in periods when not actually flying. When pilots are trained with modern trainers, it is possible to use such regimes as automatic assignment of initial exercise conditions (altitude, distance, velocity, target aspect angle, and the like), stepped-up transition to the starting line for the next stage of flight, temporarily halting the drill, review, reproduction of the conditions of the exercise just finished, and demonstration of exemplary performance. Trainers make it possible for trainees to practice the same element over and over as well as broadening their knowledge.

The reduction in costs of flight personnel training using trainers results from the fact that one hour of training on a trainer costs less than in an airplane or helicopter and the monthly flying time of crews can be reduced. It was reported in the foreign press that the U. S. Defense Department has decided to reduce the flying time

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of pilots 25 percent by 1981 through extensive use of trainers. In naval aviation, for example, it is already authorized to perform 10 percent of the total mandatory flying time and 25 percent of the minimum annual flying time by instruments on trainers. The following facts were given in the foreign press as an example of reducing the costs of pilot training.

When pilots were trained to fly helicopters by instruments using the 2B24 trainer, an average of 6.5 hours of real flying time in the helicopter was used per trainee instead of 60 hours, and the saving was \$4,000 per trainee. It was also reported that even complex and expensive trainers had a substantial economic impact. For example, it costs \$250 an hour at the tactical aviation command to operate a trainer for practicing aerial battle in the F-4 plane. In one hour, however, it is possible to have up to 15 practice battles, where in actual flight in a fighter plane not more than three could be done. According to calculations by American specialists, the cost of conducting one aerial battle on the trainer is roughly one-thirtieth of the cost of doing it in a real plane, without counting the ammunition savings.

A review of the existing trainers, the content and techniques of drills, and the primary lines of further development of trainers for training U. S. Air Force flight personnel are reviewed below. [passage omitted]

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COMMENTS ON NATO PILOT RESCUE METHODS AND EQUIPMENT

Moscow ZARUBEZHNOYE VOYENNOYE OBOZRENIYE in Russian No 10, Oct 78 signed to press 5 Oct 78 pp 59-67

[Article by Capt 1st Rank O. Oblipov, Lt Co1 (Res) V. Mikhaylin, and Maj Med Serv K, Vladimirov; "Means of Pilot Rescue"]

[Excerpt] In recent years the United States and the other capitalist countries have done a good deal to modernize existing means of rescuing crew members of military airplanes and helicopters and to devise new, more effective means. The reason, say foreign specialists, is that despite the fact that aviation units and subunits are receiving increasingly sophisticated flying craft, losses of aviation equipment and flight personnel are increasing year after year. For example, in the U. S. Armed Forces alone there were 367 flight accidents in 1975 resulting in the destruction of 239 airplanes and helicopters. In addition, the experience of so-called local wars demonstrated that existing means for rescuing the crew members of aircraft that are shot down are inadequate to modern needs.

Considering all these factors, as well as the great cost of aviation equipment and the difficulty and length of time required to train flight personnel to fly modern airplanes and helicopters, military specialists in the United States and the other members of the aggressive NATO bloc are giving great attention to devising means of pilot rescue. These devices are subdivided into two primary groups, those for abandoning the aircraft and those for saving pilots who have abandoned their aircraft. The former group includes parachutes and ejection seats. The second group is further divided into three subgroups: survival and life support means (inflatable life jackets, protective suits, boats, supplies of food and water, medications, and other special packages); signal devices (emergency radio sets and radio beacons, optical, light, and smoke signalling devices); and means to deliver pilots from aircraft that have been shot down to the position of friendly troops. In the opinion of foreign specialists, the increasing costs of building and introducing these devices will be repaid because they will save the lives of experienced pilots who have suffered accidents or been shot down and these pilots will return

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to the ranks quickly. By contrast, training new pilots would take significant material expenditures and, most importantly, time.

According to the views of the U. S. Air Force Command, the efficiency of pilot rescue devices can be characterized by the percentage of pilots who safely abandon aircraft and return to the positions of their units.

With the purpose of studying the capabilities of existing systems for emergency abandonment of airplanes and helicopters and to find steps to promote the survival of pilots after ejection, representatives of Air Force headquarters and specialities from the aviation and space medicine laboratories of the Air Force and U. S. Navy Medical Service analyzed data obtained during the conduct of combat actions by American aviation in Southeast Asia.

As a result, they came to the conclusion that while regular devices do provide some degree of safe abandonment of damaged aircraft by pilots, the systems for life support, finding them, and returning them to friendly territory are ineffective and do not meet current requirements. As the foreign press observed, a large majority of the American pilots who were forced to abandon their aircraft over territory occupied by forces of the national liberation movement were taken prisoner. The percentage of pilots taken prisoner was especially high when they landed near large populated points or concentrations of enemy troops.

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COMMENTS ON WESTERN ANTISUBMARINE DEFENSE OF AN AIRCRAFT CARRIER GROUP

Moscow ZARUBEZHNOYE VOYENNOYE OBOZRENIYE in Russian No 11, Nov 78 signed to press 3 Oct 78 pp 65-70

[Article by Capt 2nd Rank A. Chistyakov: "Antisub Defense of an Aircraft Carrier Group"]

[Text] Following their aggressive plans against the Soviet Union and the other socialist countries, militaristic circles in the West assign an important role to multipurpose and assault aircraft carriers, which are the primary element of general-purpose forces in the navies of the leading capitalist states (the United States, Great Britain, and France). In the opinion of foreign specialists, both at the present and in the future aircraft carriers will be the primary striking force of the navy in wars where nuclear weapons are not used and a strategic reserve in the case of allout nuclear warfare. Aircraft carriers are expected to help gain and hold supremacy at sea and in the air in the region of combat actions, deliver strikes against ground and sea targets using conventional and nuclear weapons, provide air cover for assault landing forces during the sea crossing, provide direct support to marine assault parties and ground forces in the coastal zone, and blockade straits to prevent enemy ships from reaching the high seas. In peacetime the imperialists use aircraft carriers for shows of force in key regions of the world in order to put pressure on other countries and carry out interventions against them.

The regular U. S. Navy has 13 multipurpose aircraft carriers, the British Navy has one assault carrier, and the French Navy has two multipurpose carriers. According to future plans, multipurpose aircraft carriers are to be built only in the U. S. Navy, which expects to maintain at least 12 ships. At the same time, plans call for modernization of ships of this class that have already been commissioned.

To accomplish the missions given to aircraft carriers carrier assault (multipurpose) forces and assault (multipurpose) groups are formed. The primary organizational unit is the carrier group. The carrier group of ships with conventional power plants includes one aircraft

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carrier, 5-8 escort ships (cruisers, destroyers, and frigates), and an atomic torpedo submarine.

The atomic aircraft carrier group may include, in addition to a nuclear-powered carrier, up to four atomic cruisers and an atomic torpedo submarine. American naval specialists believe that such a group has several advantages over the conventional group because of its greater mobility and self-sufficiency and its ability to carry more airplanes, aviation ammunition, and fuel.

Foreign naval specialists believe that multipurpose and assault aircraft carriers are more vulnerable to modern naval weapons than ships of other classes because of their very great size; the atomic aircraft carrier Chester W. Nimitz, for example, is 332 meters long and 40.8 meters wide. A deeply echeloned defense against enemy forces is created, therefore, to insure their fighting stability in all stages of action. Special attention is devoted to antisubmarine defense, which is performed by surface ships, aviation, and atomic torpedo submarines.

Surface ships are one of the primary means of searching for and destroying enemy submarines and usually operate together with carrier-based antisub helicopters as a close screen for the carrier. These ships can wage effective battle not only against submarines but also surface ships, airplanes, and winged missiles. Destroyers and frigates with both missile and artillery weapons and also cruisers are the primary classes of surface ships used for antisub defense. These ships perform missions related to other types of defense (air, missile, and ship defense) at the same time.

Surface ships have various means of detection and destruction for antisubmarine defense of aircraft carrier groups. According to information in the foreign press, the primary means of detection on U. S. surface ships in the screen forces of a carrier group are sonar stations of the following types: AN/SQS-26, AN/SQS-23, AN/SQS-56 (a modernized variation of the AN/SQS-23 sonar, it is installed in antimissile defense frigates of the Oliver H. Perry type), and AN/SQS-53 (on destroyers of the Spruance type). The DDG47 destroyers and CGN atomic cruisers being planned for construction are to be equipped with new AN/SQR-19 direct listening stations.

Three types of missile complexes are used for antisubmarine defense on surface escort ships: Asrok (United States), Malaphon (France), and Ikara (Great Britain).

Among the primary antisubmarine torpedoes used by surface ships and equipped with self-guiding systems are the American MK37 (model 0), MK43 (model 1), MK44 (models 0 and 1), and MK46 (models 0 and 1) as well as the French L3 and L5 (model 1).

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Antisub helicopters occupy a special place in the weapons system of surface ships. Participation by helicopters in the search for an underwater enemy expands the ship's capabilities for detection and extended tracking and increases the probability that the submarine will be destroyed by antisubmarine weapons.

According to reports in the foreign press, American ships have adopted SH-2D and SH-2F helicopters of the Lemps system and the SH-3A and SH-3D modifications of the SH-3 Sea King helicopter.

The surface ships of the British Navy have the Lynx antisub helicopter which, according to the predictions of experts, will be the most common antisub helicopter in the navies of the NATO countries. In addition, they have Sea King, Wasp, and Wessex helicopters.

Antisub aviation is the primary means of providing antisub defense for an aircraft carrier group. Antisub aviation includes shore-based patrol aircraft (P-3C Orion, MR-1 Nimrod, and Brege 1150 Atlantic), carrier-based planes (S-3A Viking and Brege 1050 Alize),² and helicopters.

In recent years atomic torpedo submarines have been widely used for the antisubmarine defense of carrier groups. They have high speed, secrecy of action, and the capability of maintaining reliable communications with surface ships, which makes it possible to organize close cooperation during performance of missions at sea. Traveling under water at a certain distance from the carrier and maintaining underwater audio communication with it or one of the escort ships, foreign specialists feel that they can wage an effective struggle against submarines. The atomic submarines have various types of sonar equipment for detection.

The American atomic torpedo submarines are equipped with the Sabrok antisub guided missile system and self-guiding torpedoes to destroy enemy submarines.

Foreign military specialists note that the antisub defense of an aircraft carrier group is done in close coordination with the SOSUS permanent passive long-range sonar observation system, which significantly increases the effectiveness of the antisub defense of an aircraft carrier group.

In certain cases antisub helicopters launched from assault helicopter carriers can be used to reinforce the antisub defense of NATO aircraft carrier forces.

¹ For more detail on ship antisub helicopters see ZARUBEZHNOYE VOYENNOYE OBOZRENIYE No 8, 1977, pp 79-84 — (Editor).

For information on shore and carrier based antisubmarine airplanes see ZARUBEZHNOYE VOYENNOYE OBOZRENIYE No 2, 1976, pp 83-90 — (Editor).

The antisubmartue defense of a carrier group is a zonal-object defense which combines defense of an object (the aircraft carrier or other major ships of the group) and a zone. Expected enemy resistance, the presence of friendly forces, the missions being performed by the group, and characteristics of the carrier group's crossing route and region of combat maneuvering are the chief influences in organizing the structure of escort forces.

In the region of combat maneuvering the structure of escort forces should guarantee maximum effectiveness in the use of weapons, primarily carrier-based aviation, with adequate defense against submarines, means of aerial attack, and surface ships.

The arrangement of ships relative to the center of the order, where an aircraft carrier is usually located, and the distance between ships vary depending on the situation.

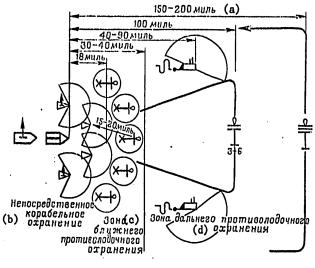
Primary efforts in the struggle against enemy submarines are concentrated on the threatened sector because it is there that the attacking submarine will have to break through the echeloned defense; the defense is provided by antisub airplanes, submarines, surface ships, and helicopters. American specialists believe that the main problem for a submarine that intends to attack the aircraft carrier with torpedoes will be its speed. But increasing the speed of the submarine itself in order to occupy a position for the attack increases the likelihood that it will be detected by escort forces.

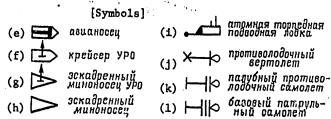
In all stages of activity of the carrier group, close and distant zones of antisub defense are usually organized.

The close screen, which is provided by close escort ships and carrier-based helicopters, is usually circular. Where there are not enough escort ships their place can be taken by antisub helicopters, and if necessary an atomic submarine may be included in this force. The primary mission of the close screen forces is to prevent an enemy submarine from carrying out a torpedo attack. In the opinion of many foreign specialists, submarines should be detected, attacked, and destroyed mainly on the crossing route of the carrier group by mixed aviation-ship search and destroy groups that include antisub airplanes (shore and carrier based), deck-based helicopters, atomic submarines, and surface ships.

When an aircraft carrier group is deployed for a crossing at fairly high speed (more than 20 knots), the escort is reinforced in the forward sectors of the cruise formation (see illustration below) because this is the direction that is considered most dangerous with respect to submarine attacks.

Antisubmarine Formation of an Aircraft Carrier Group During a Sea Crossing





- Key: (a) 150-200 Miles (All other distances also given in miles);
 - (b) Close-In Ship Escort
 - (c) Zone of Close Antisubmarine Screen;
 - (d) Zone of Distant Antisubmarine Screen;
 - (e) Aircraft Carrier;
 - (f) Missile Cruiser;
 - (g) Missile Destroyer;
 - (h) Destroyer;
 - (1) Atomic Torpedo Submarine;
 - (j) Antisubmarine Helicopter;
 - (k) Deck-Based Antisub Airplane;
 - (1) Shore-Based Patrol Airplane.

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The close screen ships are arranged at a distance equal to 1.75 times the operating range of the sonar equipment to create a solid ring of sonar observation. The submarine detection range of close screen ships together with helicopters is up to 40 miles from the center of the cruise formation.

During the search for enemy submarines deck-based helicopters cooperate closely with deck-based antisubmarine planes. When the carrier group approaches a region where the presence of enemy submarines is likely the deck-based antisub planes and helicopters take off from the aircraft carrier. The planes search on the distant approaches to the carrier and the helicopters work in the zone of the close-in escort ships.

An airplane searches for submarines at an altitude of 240-370 meters for about four hours. If it finds a sub it attacks it, simultaneously reporting this to the command element of the group. However, American specialists believe that an attack based on the data from the initial detection may not always be successful. Therefore, helicopters or other airplanes are sent to the region of the last detection of the enemy submarine. Success is greatly improved if radiosonic buoys and a magnetic detector are used for more precise determination of the submarine's position. Radiosonic buoys may be set down along a closed contour that covers a given region or in a line across the assumed course of the submarine. When using a magnetic detector planes fly at the minimum safe altitude (about 30 meters).

In the search for submarines helicopters usually follow encirclement tactics in which they occupy positions in a small circle that covers the presumed location of the sub and then, maneuvering in spirals, converge. They examine the region using dipping sonars, periodically hovering at altitudes of 4-6 m above the surface of the water at the places where the sonars have been dipped.

In the opinion of foreign specialists antisub helicopters have the following advantages over surface ships: greater speed in examining a region, the possibility of surprise appearance above a submarine and establishing contact before the sub can evade detection, and the ability to track a fast-moving target for a long time. Among the shortcomings is the difficulty, and sometimes impossibility, of using helicopters in bad weather.

When surface ships search for submarines it is considered that the sonar transmissions of the surface ship can be detected under the water at a much greater distance than the ship can detect its target (submarine), and thus the submarine, upon learning that it is being hunted, can take steps in time to evade a meeting with the escort forces. Therefore, foreign naval specialists think it is wise for only the close screen forces to use sonar sets and complexes in the active mode. It is recommended that the surface ships of the distant screen use primarily passive means of searching and helicopters to avoid being a beacon for enemy submarines.

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In regions of combat maneuver the close antisubmarine screen is organized strictly by zones, with resources distributed throughout the entire region. In this case too, antisub defense is reinforced in those regions where the appearance of enemy submarines is most likely. When the region of combat maneuvering changes the defense of the object (aircraft carrier) is intensified but the principle of defense of a region is maintained.

In a distant zone, both during the sea crossing and in the region of combat maneuvering, the search for enemy submarines is carried on by shore and deck based antisubmarine airplanes and by the atomic submarine. At the far border of the distant zone of antisubmarine defense the search is usually conducted by one or two shore-based patrol aircraft which fly to the threatened sector 200 miles (370 kilometers) from the carrier. Deck-based antisubmarine planes patrol either on the perimeter of the formation or in a threatened sector at a distance up to 100 miles (185 kilometers). When the aircraft carrier, in the antisubmarine variation, has 20 antisub planes on board, as many as six may be in the air simultaneously.

Atomic torpedo submarines used for antisubmarine defense in the distant zone may operate independently or be controlled by a surface relay ship which maintains constant communication between the submarine and the command element of the group.

In the sea crossing submarines travel parallel to the course of the carrier force and search for enemy submarines using their sonar complexes in threatened sectors.

In the region of combat maneuvering atomic torpedo submarines can cover sectors where it is possible that enemy submarines will break through to the defended region. Their position for this purpose is set 40-90 miles (72-162 kilometers) from the center of the region of combat maneuvering.

In the opinion of foreign naval specialists, using atomic submarines for the antisubmarine defense of aircraft carrier groups significantly increases the effectiveness of the group's antisub defense in all stages of its activity.

Control of the antisub defense of a carrier group, including coordination with other antisub forces (for example, with a permanent system of long-range sonar observation) is carried out from the antisub defense control station, which is located on the aircraft carrier or one of the escort ships. It exercises centralized control over the antisub defense resources of the group, collects information about the underwater situation in the region, evaluates this information and prepares proposals for adopting plans to wipe out submarines, warns escort ships, and allocates forces to destroy enemy subs. The antisubmarine weapon control officer controls direct antisub actions by an escort ship from a battle information post.

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Controlling the actions of an atomic torpedo submarine under water is the most difficult aspect. In this case, the submarine can establish communication with surface ships only by means of underwater audio communication. The process of control is complicated by the need to transmit appropriate information from the antisub defense command station of the carrier group. In these cases escort ships must be used as relays. According to reports in the foreign press, atomic submarines have short and long wave radio receivers, two shortwave transmitters, and sonar equipment to maintain communications between ships under water and surface ships for the purpose of controlling the submarines. Covered, extendable, towed, and buoy antennas make it possible to carry on two-way communication above and under water.

Thus, the naval commands of the United States, Great Britain, and France are devoting considerable attention to questions of the antisubmarine defense of aircraft carriers both in the sea crossing and in combat regions. They believe that effective antisubmarine defense will be one of the primary conditions for maintaining the combat stability of aircraft carrier forces, a key element of general-purpose surface forces.

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COMMENTS ON THE U. S. SIXTH FLEET

Moscow ZARUBEZHNOYE VOYENNOYE OBOZRENIYE in Russian No 11, Nov 78 signed to press 3 Oct 78 pp 71-76

[Article by Capt 1st Rank I. Karemov: "The U. S. Sixth Fleet"]

[Text] The militaristic plans of the American imperialists assign a special place to the Mediterranean Sea, primarily because of its important strategic position.

The Mediterranean Sea is the connecting link among three continents, Europe, Africa, and Asia. Internationally important sea and air routes pass along it, connecting major European countries with the countries of the Middle East and North Africa and, through the Suez Canal, with the countries of Southeast Asia and the Indian Ocean region. It is near the rich oil deposits of the Middle East, which represent 70 percent of the explored reserves of the capitalist world. According to reports in the foreign press, each year more than 200 million tons of petroleum is transported across the Mediterranean Sea. When the Suez Canal was closed many petroleum pipelines were brought directly to Mediterranean ports.

U. S. imperialist circles consider the Mediterranean Sea region and the territory adjacent to it as a good base of operations for possible direct acts of aggression against the USSR and other socialist countries.

During World War II American ships in the Mediterranean landed troops in North Africa, on the island of Sicily, and on the south coast of France. In 1945 the U. S. naval command left a small force of ships in the Mediterranean to support American troops in Italy. The head-quarters of this force was located on a destroyer mother ship based in Naples. In August 1947 this mother ship was replaced by a cruiser. On 1 July 1948 U. S. naval forces in the Mediterranean were officially reorganized as the Sixth Operational Fleet.

The U. S. Sixth Fleet took final form in 1950. It includes surface ships, submarines, and subunits and units of naval aviation and marines.

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According to the plans of the U. S. naval command the Sixth Fleet is given the following primary missions: gain and hold supremacy at sea, wage combat actions from the sea, support ground forces, support the activities of atomic missile submarines on combat patrol in the Mediterranean, and demonstrate the U. S. military presence in this region. It is an important means of intervention by American imperialism in the domestic affairs of the Mediterranean countries.

The commander of the Sixth Fleet is at the same time commander of naval assault forces in the Southern European theater. Within the American military he is subordinate to the commander of U. S. naval forces in Europe (with headquarters in London) and in the NATO organization he is subordinate to the commander of NATO Unified Armed Forces in the Southern European theater (headquarters in Naples). The deputy commander of the Sixth Fleet for questions of planning and coordination of fleet activity within the NATO Unified Armed Forces is also permanently stationed there. He heads a special shore headquarters with 35-40 officers.

U. S. strategists consider the Sixth Fleet the most universal, flexible, and combat-ready operational formation of American naval forces in Europe, with significant striking power. It has formations and units of the fleet, naval aviation, and marines. In 1977 the Sixth Fleet had up to 50 ships and auxiliary vessels, including two multipurpose aircraft carriers (carrying 160-180 airplanes and helicopters), 3-4 missile cruisers, 15-20 destroyers and frigates (including missile ships), 5-6 atomic submarines, 5-6 landing ships (including landing helicopter ships with 32 transport-landing helicopters on board), and mobile rear support vessels. An expeditionary marine battalion is permanently assigned to the landing ships. The fleet has about 25,000 personnel.

The fleet does not have a fixed ship composition; instead it is composed of combat-ready ships and naval aviation and marine units of the Atlantic Fleet (Second Operational Fleet) which spend up to six months in the Mediterranean. The exception is the flagship, a missile cruiser on which the cruise headquarters of the fleet commander is located. This cruiser spends 2-3 years without a break in the Mediterranean Sea.

When the international situation in the Mediterranean region worsens the Sixth Fleet is usually reinforced with ships sent from the United States. Thus, during the American intervention in Lebanon in 1958 the fleet's ship composition was increased to 76 fighting ships and auxiliary vessels and the number of personnel rose to 35,000. Just before the Arab-Israeli war in October 1973 the total number of ships in the fleet was raised to 65.

Organizationally, the Sixth Fleet includes several task forces which are designated to perform both independent and combined missions.*

^{*} An organizational chart of the U. S. Sixth Fleet was given in ZARUBEZHNOYE VOYENNOYE OBOZRENIYE No 8, 1977, p 70 — (Editor).

The task forces have 2-digit numbers in which the first digit indicates affiliation with the Sixth Fleet and is always "6,"

The 60th Task Force (aircraft carrier) is the main striking force of the fleet. It usually has at least two aircraft carrier groups. The foreign press reports that each group includes a multipurpose aircraft carrier, one or two missile cruisers, 5-6 destroyers and frigates, and an atomic submarine.

At the start of 1978 the Sixth Fleet had the multipurpose atomic aircraft carrier Chester W. Nimitz and the multipurpose carrier America. Each carrier has an air wing with up to 10 squadrons of airplanes and helicopters (about 100 aircraft). Thus, according to reports in the American journal AVIATION WEEK, the following aircraft are based on the carrier America: two fighter squadrons (each with 12 F-14 Tomcat planes), a ground-attack squadron (14 A-6 Intruders including four refueling planes), two ground-attack squadrons (14 A-7 Corsairs each), a squadron of long-range radar detection planes (four E-2C Hawkeyes), a squadron of four EA-6B Prowler radioelectronic suppression planes, a detachment of three RA-5C Vigilant heavy ground-attack-reconnais—sance planes, a squadron of 10 S-3A Viking antisubmarine planes, and a squadron of eight FH-3A Sea King antisub helicopters.

The missions of the 60th Task Force are: deliver strikes against sea and land targets with both conventional and nuclear weapons, provide air support to ground forces operating in coastal sectors and to marine landing parties during their landing and fighting on shore, and combat enemy surface ships and submarines at sea.

Deck-based aircraft are capable of delivering conventional or nuclear weapons to targets at up to 1,800 kilometers from the aircraft carrier. A special feature of the carrier task force, in the opinion of American military specialists, is its high mobility which makes it possible for the task force to move up to 600 miles (about 1,100 kilometers) in 24 hours.

Under ordinary conditions, the foreign press reports, the fleet aircraft carrier groups operate separately about 400 miles from one another. Each day planes from the carrier perform about 120 takeoffs and landings. The angled flight deck and other special devices allow planes to land at 30-second intervals. During a six-month stay by an aircraft carrier in the Mediterranean the air wing logs up to 3,000 hours of flying time.

Judging by material in the foreign press, 70 percent of the airplanes of a carrier must be in constant readiness for takeoff. However, military specialists acknowledge that this level of combat readiness is not always maintained.

The 61st First Task Force (amphibious assault) is designated for moving a marine assault party across the sea and landing them on a shore.

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The task force includes a group of landing ships called the Amphibious Ready Group, made up of an assault helicopter ship, an assault helicopter ship-dock, an assault transport-dock, a tank landing ship, and a landing freight transport. The ships of the group can move and land 1,800-2,000 marines (an expeditionary battalion) on shore using naval assault-landing means or inland from the coast by means of transport-landing helicopters. These methods may also be combined.

The landing ships of the ready group are alternated every six months.

The 62nd Task Force (marines) is an expeditionary battalion (a marine battalion with attached tanks, artillery, and helicopters). It is usually drawn from the U. S. 2nd Marine Division. The battalion is replaced at the same time as the ships of the ready group, on which it is stationed.

The 63rd Task Force (service forces) performs rear support services for the ships and aviation of the Sixth Fleet. It has one high-speed comprehensive supply transport, special weapons and ammunition transports, tankers, a petroleum carrier, a food transport, a destroyer tender, an ocean-going tug, a rescue ship, a repair and maintenance ship, and other auxiliary vessels.

The headquarters of the task force monitors the use of fuel and petroleum products by the fighting ships of the fleet and refuels them. American tankers on the Mediterranean, according to reports in the foreign press, are capable of carrying about 100,000 tons of fuels and lubricants.

Virtually all supply articles for the ships of the Sixth Fleet are delivered from the United States. Each month more than 1,550 tons of food and about 300 tons of consumable goods are delivered from Norfolk to the Mediterranean for fleet personnel. Fresh produce is bought at foreign ports.

The U. S. navy command devotes significant attention at exercises to practicing methods of replenishing ships supplied at sea. As the American press reports, the 63rd Task Force carries out more than 2,500 operations to replenish ship supplies at sea and on the move in a year, with transport helicopters participating in 10 percent of them.

The 65th Task Force (temporary) is formed periodically to perform special missions. In 1966 it was formed to locate and raise the B-52 bomber and its nuclear bombs which had fallen into the sea near Palomares, Spain; in October-November 1971 it was formed to conduct tests of new sweeps and apparatus for sweeping acoustic and magnetic mines by helicopter. It included a subunit of minesweeping forces that had a headquarters group and four CH-53A Sea Stallion minesweeper helicopters. The subunit was based at the Suda airbase on the island of Crete.

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The 66th Task Force (temporary) is designated to reinforce the antisubmarine defense of the Sixth Fleet's aircraft carrier task force if the situation in the Mediterranean Sea region becomes complex.

The 67th Task Force (antisubmarine) searches for and destroys enemy submarines and carries on reconnaissance. It has P-3C Orion shore-based patrol airplanes that operate from the naval air bases at Sigonella on the island of Sicily and Suda on Crete, as well as a squadron of reconnaissance planes stationed at the U.S. Navy airbase in Rota, Spain.

The 69th Task Force (submarine forces) has several atomic submarines that are based at La Maddalena, Sardinia.

The naval bases and ports of Italy, Greece, Turkey, Spain, and the islands of Malta and Crete are used for bases of fleet ships and for visits. The U. S. navy command works tirelessly to turn some of these ports into permanent bases for its fleet. According to reports in the foreign press, the United States has already received consent to equip and use the Italian port of La Maddalena and two Spanish ports, Ceuta and Cartagena, as naval bases. The lease on the leading naval base at Rota has been extended. Negotiations are underway with the Government of Israel to lease territory for basing American ships in the port of Haifa.

During the Arab-Israeli conflict of 1967 the Americans set up an advance operations base in Suda Bay on the island of Crete to support naval actions in the eastern part of the Mediterranean. Ongoing repair for ships of the Sixth Fleet is performed there on a destroyer tender. Repair work is also done on an atomic missile submarine tender stationed at the Rota advance naval base and an atomic submarine tender at La Maddalena.

The fleet has special detachments in Naples and Rota to coordinate logistic support and insure uninterrupted operation of the supply system. These detachments use aircraft of the 24th Naval Aviation Transport Squadron to transport freight. These planes usually take off from the Rota and Sigonella airfields and fly "special" routes determined by actual supply needs. Each month carrier-based transport aircraft deliver at least 250 tons of different kinds of freight to the aircraft carriers of the Sixth Fleet.

The combat training of the Sixth Fleet is conducted in accordance with plans to use it in limited (local) conflicts as well as in general nuclear war. Training aims at raising combat readiness of the assault forces of the fleet first of all, the aircraft carrier groups as well as antisub forces and marines. As the foreign press has reported, ships of the Sixth Fleet spend more than 50 percent of their time at sea participating in various exercises. The Sixth Fleet devotes more than half of the time allocated for combat training to joint exercises with the navies of the other NATO countries on the Mediterranean (Italy, Greece, Turkey, and also Great Britain and France). During these exercises the carrier groups practice the

missions of delivering strikes against sea and ground targets with carrier-based aircraft, providing air support to ground forces in the coastal sectors of the Southern European theater, fighting enemy surface ships and submarines, landing assault parties, and carrying on the air and antisub defense of the task forces.

Similar missions are performed by forces of the Sixth Fleet at exercises of the National Week type, held on the basis of U. S. Navy national plans twice a year. The Sixth Fleet usually works on fighting enemy surface vessels in bilateral exercises of aircraft carrier groups during which each group, using cover and deception and observing full radio and radar silence, maneuvers in an assigned region in an attempt to find and destroy the enemy. The American press reports that such exercises usually end in success, with the sinking of one of the aircraft carriers and several escort ships.

According to statements by Pentagon leaders, the Sixth Fleet, being an "implement of deterrence," is always in a high degree of combat readiness and even in peacetime is staffed at wartime levels. As the base for formation of NATO naval assault forces in the Southern European theater, it can, as shown by the events of recent years, operate independently in support of the imperialist policy of the United States in the Mediterranean Sea region, sometimes not coordinating its actions with NATO partners at all.

For example, during the night between 24 and 25 October 1973 (at the time of the Arab-Israeli War), the Sixth Fleet was switched to a state of combat readiness No 3 without notification of American allies and the main forces of the fleet (two aircraft carrier groups and a group of landing ships with marines on board) were assembled in a region to the south of the island of Crete, in the immediate vicinity of combat actions. Moreover, a third aircraft carrier group (the carrier John F. Kennedy with three escort ships sent from the North Sea) was brought into the Mediterranean and the carrier Hancock from the Seventh Fleet, with escort ships, arrived in the Arabian Sea to insure an American presence to the south of the conflict region.

This information from the foreign press concerning the activities of the U. S. Navy Sixth Fleet, which is by no means the full story, illustrates that it is one of the primary tools of the expansionist policy of imperialist circles in the Mediterranean Sea basin.

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COMMENTS ON U. S. NAVY AUTOMATED CONTROL AND COMMUNICATIONS SYSTEM

Moscow ZARUBEZHNOYE VOYENNOYE OBOZRENIYA in Russian No 11, Nov 78 signed to press 3 Oct 78 pp 76-84

[Article by Col-Engr I. Loshchilov, candidate of technical sciences: "Automation of the U. S. Navy Control and Communications System"]

[Text] In the next decade, the foreign press reports, the U. S. military leadership intends to revise the navy command and control system so that it is better suited to the requirements of its military strategy and the increased capacities of weapons and combat equipment. At the present time the command and control system needs centralization of such functions as collection and analysis of observation data, monitoring the position of ships, operational planning of their use in combat, and formulation of missions by the higher command element for all combat-ready forces down to the individual ship.

American navy specialists believe that all this can be done through a fundamental revision of existing control and communications systems and automation of them. In 1975 the U. S. navy command reached a decision to work out a long-range plan for development of a general-purpose Naval Command and Control System (NCCS). Following this plan a series of new structural and technical concepts to be implemented to improve the operating effectiveness, survival capacity, flexibility, and secrecy of command and control.

Operating effectiveness is to be improved by high-speed automatic processing, display, and transmission of data. It is considered essential to concentrate the processing of most data on shore in order to give ship command and control elements prepared data received from observation and reconnaissance elements and information on other types of combat and logistical support.

The survival capability of the command and control system is to be maximized by using standardized command centers capable of organizing and restoring command and control quickly during preparation for and

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waging of combat actions. They should be mutually replaceable and capable of redistributing missions in case one or several centers are knocked out. Various types of communications will be used for data exchange among the command centers. In the opinion of American military specialists, this will insure the necessary reliability of information transmission under conditions of radioelectronic warfare.

Flexibility is to be increased by joining particular command and control systems, standardizing them, and then integrating them. Special attention is being devoted to the problem of the compatability of different command and control systems (surface ships, submarines, and naval aviation) with one another and with the other branches of the armed forces, integrating ship systems for control of forces and weapons, and joining ship communications and navigation equipment into a single complex.

Secrecy of command and control is to be achieved by extensive use of equipment to encipher telephone and digital communication.

According to foreign press reports, the NCCS system will be based on shore command centers for fleets and tactical flagship command and control centers at sea.

The fleet command centers will provide processing and summarization of operational information received from various sources, display of it in a form that is convenient for decision-making, and rapid, precise delivery of plans to subordinate formations and higher command levels. One of the primary functions of the centers will be to integrate information received from the shore antisub defense centers, the information centers of the Ocean Surveillance Information System (OSIS), and the centers of the Naval Intelligence Processing System (NIPS). The processing and summarization of information will be done in the interests of both shore and ship command and control elements. Another important function of the center is communication with organs of the strategic leadership of the U. S. Armed Forces. This will be done by including these centers in the global system of operational command and control of the U. S. Armed Forces and supplying them with standard equipment for automated data processing and transmission.

Plans call for setting up fleet command centers at the headquarters of the commanders of the Atlantic and Pacific fleets and the U. S. naval commander in Europe. An experimental command center for the commander of the Atlantic Fleet is now being put together at the Norfolk (Virginia) Naval Base. It will use a standard H6000 computer and a special data display system for automated data processing. During the trials in 1978-1979 the general procedures for functioning of the command center, the reliability of operation of the equipment, and the primary data processing algorithms will be tested. In this same period completion of development of the Composite Operational Reporting System (CORS), a system for preparation of operational reports on the condition of the navy, is contemplated. This system will be used for

preparation and feeding standard messages to the computer with subsequent automatic transmission within the global system of operational command and control of the U. S. Armed Forces. After the tests have been made, the command center equipment is to be installed at the headquarters of the commander of the Pacific Fleet and the U. S. naval commander in Europe. Similar equipment is to be supplied to the operational center of Navy Headquarters also. In the first half of the 1980's these centers are going to be joined into a single network, which will provide direct, high-speed data exchange, use of general information files by each command element, and automatic selection of data on query by the leadership and composite reports (concerning the situation in military theaters) for operational orientation of subordinate forces.

Tactical flagship command and control centers are to be deployed on flagships (aircraft carriers, missile cruisers, and the headquarters ships of amphibious forces). They will serve as the basis for organizing the command and control of all-arms formations; therefore, they should provide coordination with the command and control systems of various classes of ships, naval aviation, and submarines.

According to information in the American press, the centers are being developed in two stages. In the first stage a temporary variation is being developed and going through comprehensive testing under real conditions. This equipment variation was installed on the aircraft carrier John F. Kennedy in 1977 for testing, and precise determinations were made of time requirements for accomplishing operational-tactical missions, the intensity, completeness, and reliability of information received from observation systems, procedure for coordination with the fleet command center, and the ability to maintain continuous control when some equipment is down. In 1979 the equipment is to be installed on several more ships for testing and preparations will begin for series production. In the second stage standard equipment will be developed, manufactured, and installed on ships. In all about 40 sets of such equipment are contemplated. The approximate completion date for the second stage is 1984.

The flagship command and control centers should contain tactical support centers (TSC's) and intelligence centers (IC's), which are deployed on aircraft carriers, and automated systems for tactical air radio and radar intelligence called the Tactical Airborne Signal Exploitation System (TASES) and the Naval Tactical Data System (NTDS). The tactical support centers are designed to coordinate the actions of the antisubmarine aircraft of carrier task forces. They should provide exchange of information during the planning and performance of missions to combat submarines and processing and display of data for the crews of carrier-based planes and ship commanders. These centers are a constituent part of the control system for tactical antisubmarine aviation (ASTACS — ASW Tactical Support System) and operate in it as the link between the flagship command and control centers and the NTDS. Experimental models of equipment for the

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centers are now going through testing and series production is contemplated in 1980.

It is expected that the TASES system will be installed on S-3A antisub airplanes. This should significantly expand the capacities of tactical flagship command centers for collection of information on the surface situation in naval theaters. Just 16 planes are to be equipped with this system. It is expected that the system will be put into operation in the first half of the 1980's.

The intelligence centers are part of the Naval Intelligence Processing System. They have been operated since 1962 and are now being modernized. The primary goals of modernization are to switch to up-to-date automated data processing and display equipment, to introduce more sophisticated programs that provide remote access and updating of information files, and to work out reliable methods of enciphering data. After this, the centers should supply intelligence data through the NTDS system to virtually all ships in the tactical control element.

In the opinion of U. S. naval specialists, the NTDS system, which has already been installed in about 80 ships, remains the basic naval command and control system at the tactical level. It can perform a broad range of missions related to command and control of the combat actions of operational groups, detachments, and individual ships, organize the antisubmarine struggle, and control aviation and other types of weapons. The further development of the system is the subject of three projects and will follow the path of standardizing automation and communications equipment and interlinking equipment already in operation with future models.

One of the projects contemplates development of the AN/UYQ-21 series of standardized display units (displays, large screens, automated panels, devices to automatically read data from documents, and equipment for storing, switching, and transmitting messages). All these units will have modular design. Judging by reports in the foreign press, an experimental batch of 17 sets has been manufactured and series production is planned in the early 1980's. The AN/UYQ-21 series of display units is to be used all the way until 1990 in virtually all tactical command and control systems in the navy.

The second project aims at improving the set of terminal equipment for the LINK 11 automated data transmission radio line. The set includes a small AN/UYK-20 computer, an AN/USQ-69 display for displaying alpha numeric information, and a transceiver. After completion of development work in 1979 the LINK 11 set will replace the obsolete equipment used in the NTDS.

The third project envisions integration of all ship combat information control systems and the development of standards for the equipment used in the Naval Tactical Data System.

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In the future the NTDS system is expected to be used on ships of all classes. One project, in particular, envisions building a special variation of the system for installation on Charles Adams-type missile destroyers and certain frigates. It includes the standard AN/UYK-7 computer, peripheral equipment, and a standardized series AN/UYK-21 display unit. The first models of the new system are contemplated for installation in 1981,

The NTDS is connected to the Air Tactical Data System (ATDS) combat information and control system designed for the command and control of the combat actions of naval aviation. The ATDS is now being modernized (new automation equipment, radar, and navigation means are being installed on the E-2A and E-2C planes). In addition, the system is being interlinked with the Airborne Warning and Control System (AWACS) developed by the Air Force for long-range radar detection and control.

When large marine assault parties are being landed the tactical flagship command and control centers are assigned to coordinate the actions of the operational formation and marine units. Technically speaking, this mission will be accomplished by interlinking them with the automated system for command and control of marine combat actions, the Marine Tactical Command/Control System (MTACCS) whose introduction is planned in the first half of the 1980's. Several subsystems are being developed for it: an operational subsystem (Tactical Combat Operations System — TCOS); intelligence subsystem (Marine Air Ground Intelligence System — MAGIS); a fire and aviation support subsystem (Marine Integrated Fire and Air Support System — MIFASS); the Marine Air Command/Control System (MACCS), and others. They will all be interlinked with similar elements existing at the tactical support centers, intelligence centers, and in the TASES and NTDS systems.

According to the foreign press, cooperation with other branches of the armed forces when the navy is supporting ground forces in coastal sectors will be organized through the tactical flagship command and control centers. Cooperation will be based on the principle of compatibility at the tactical level among the command and control systems of the navy, air force, and ground forces. The chiefs of staff assigned several programs for this purpose. Two of them, the Tactical Air Control System/Tactical Air Defense System (TACS/TADS) and Ground and Amphibious Military Operations (CAMO) have been assigned to the naval chief of staff.

The TACS/TADS program envisions combining the command and control systems for aviation and air defense. In the navy it includes the NTDS, ATDS, and MACCS systems; in the ground forces it encompasses the AN/TSQ-73 automatic antiaircraft artillery control system; in the air force it covers the Tactical Air Control System (TACS) and its constituent elements (command/control and warning centers). The basic tactical-technical requirements for interlinking these systems have now been fully developed and in 1978 work on the program moved into the stage of experimental design.

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The GAMO program aims at guaranteeing compatibility among the control systems of the branches of the armed forces participating in ground operations. In the navy the program encompasses the TCOS, MIFASS, and MAGIS systems; in the ground forces it covers the Tactical Operations System (TOS), the Tactical Fire Direction System (TACFIRE), and an automatic system for determining position, recognition, and data transmission called the Position Location and Reporting System (PLRS); in the air force it includes the Tactical Information Processing and Interception System (TIPI). Work on the GAMO program was begun in 1978 and should be completed in 1986.

In the opinion of American military specialists, practical realization of the principles of construction of the NCCS system depends primarily on continuous, reliable, and secret communications between command centers and subordinate forces. Moreover, there must be direct realtime data transmission among computers on special high-speed automated channels and a greater degree of specialization in command and control of naval forces from shore installations. This increases the importance of circular communications systems. There must be an improvement in the exchange of information among all elements of fleet organization (extensive automation and standardization of the processes of collection, processing, and disseminating messages is contemplated). These requirements should be realized in the Naval Telecommunication System (NTS), whose modernization is a constituent part of the program for building the NCCS. Figure 2 [not reproduced] shows the primary structural elements of the future Naval Telecommunication System.

Onshore communication in the NTS system is accomplished through main and auxiliary shore communications stations deployed in different regions of the world. They are part of the U. S. Department of Defense's automated communications systems AUTOVON and AUTODIN, which make possible telephone conversations and data transmission in discrete form. The five main stations, located in San Francisco, Norfolk, Naples, Honolulu, and the island of Guam, provide communications for naval commanders in their zones of responsibility, coordinate and monitor the work of auxiliary stations, and carry on circular transmissions. They are part of the Fleet Satellite Broadcast (FSB) system of navy space communications which uses channels of the Fleet Satellite Communication (FLTSATCOM) satellite communications system.

Development of the onshore part of the NTS system is proceeding by automation of message processing and distribution to serve all command and control elements and naval institutions and provide reliable and operational information exchange with ships. There are three basic programs at the present time.*

^{*} See ZARUBEZHNOYE VOYENNOYE OBOZRENIYA No 6, 1978, pp 78-81 - (Editor).

The first program envisions creation of an automated system for message exchange among subscribers at shore headquarters and services (the Local Digital Message Exchange — LDMX). Each unit of it should serve as a territorial center for processing messages and serve up to 10 subscribers. It is interlinked with the AUTODIN system, making it possible for subscribers to reach the control elements of other branches of the armed forces and central institutions of the Department of Defense. At the present time units of the system have been deployed at 17 naval communications stations.

The second program envisions creation of an automated message processing system, the Naval Communications Processing and Routing System (NAVCOMPARS), for shore — ship — shore communication. It can perform all the functions of the LDMX system, but in relation to fleet communications stations, and therefore it is supplemented by special equipment that makes it possible to interlink with transceivers and track the position of ships. NAVCOMPARS serves as the connecting link between the AUTODIN system and the Fleet Satellite Broadcast System; after full deployment of the FLTSATCOM satellite communications system it will provide high-speed message transmission to ships from any shore post. The system equipment includes two Spectrum 70/45 computers. One serves subscribers in real time and the other is on stand-by or performing subsidiary operations. The computer has two modules for multichannel communication that connect 82 teletypes, two high-speed input units, an optical reader, and 10 displays.

The third program envisions building "remote information exchange terminals" (RIXT's). They are being organized at various shore command and control agencies. Using this equipment subscribers will have direct access to information files stored in the LDMX and NAVCOMPARS systems, formulate messages rapidly for dispatching after receiving the required information, and receive correspondence from other points. Plans call for setting up a total of 95 points provided with this equipment.

The FLTSATCOM system (decimeter wave band; first satellite launched in February 1978) is receiving primary emphasis in the organization of ship — shore — ship communications. It will provide data transmission for the navy on 10 radio channels (one is allocated for circular transmissions). Three data exchange subsystems have been organized using them: a general-purpose subsystem; a subsystem for exchange with submarines; and a subsystem for exchange among fleet command centers. The first, the Common User Digital Information Exchange Subsystem (CUDIXS) is designated for exchange of digital information among shore and ship command and control elements. It consists of several radio networks, each of which is controlled by a main station and covers a group of 60 ships. Fifty subscribers of the group (small-displacement ships) transmit only. They receive information by the circular communications system.

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The other 10 subscribers have equipment for two-way information exchange. The exchange regime is constructed following the principle of time sharing as assigned by the main station. It periodically assigns each subscriber a time interval during which it is authorized to transmit or receive messages. The main station is the intermediate link between the NAVCOMPARS system and the satellite communication terminal stations, thus allowing ship subscribers to be part of the AUTODIN system.

The new possibilities offered by satellite communication will, in the opinion of American military specialists, call forth a significant increase in information flows in shore - ship - shore communications. This will require automation of data processing not only on shore but right on the ships. Work is underway on the Naval Modular Automated Communications System (NAVMACS), which envisions building an automated communications system. Its assignment includes automating the following functions: "scanning" information transmitted by the circular system and selecting messages from it for the particular address; processing textual and graphic information; organizing data storage and retrieval; distribution of messages to internal addresses and transmission from the ship to other objects. The apparatus of the system must be interlinked with all types of ship communications, but it is oriented primarily to circular satellite communications and the digital information exchange system. NAVMACS is composed of functional hardware and software modules whose number and composition depend on the class and designation of the ship. A total of six types of sets are envisioned. The simplest are already in series production and are being installed on small ships. The most complex are in the testing stage. Plans call for ships to be fully equipped with the NAVMACS system by 1982.

According to information in the foreign press, the U. S. naval command has begun supplying satellite communication terminal equipment to its ships without waiting for full deployment of the FLTSATCOM system (the second and third satellites are to be launched in late 1978 and early 1979). At the present time about 90 percent of the terminals are capable of receiving circular communications and about 30 percent can carry on telephone conversations and transmit data along satellite communications channels. Some of the flagships will be equipped with DSCS-2 Department of Defense satellite communications terminal stations to establish direct communication with organs of the higher military-political leadership and the naval command. This range has greater noise immunity, but in the opinion of American military specialists widespread use of it in the navy will be limited by the high cost of the terminals and the necessity of stabilizing antennas.

In addition to these systems, the traditional types of shortwave, medium-wave, and long-wave radio communications continue to be important for organizing shore — ship — shore communication. In addition to them circular transmission of commands to submarines under water may be carried on in the medium-long range band through relay aircraft of the TACAMO system.

Shortwave and ultrashortwave communications, which have undergone significant changes, remain the primary form of close-in communication among ships and between ships and aircraft. New types of solid-state shortwave transceivers with special modes increase the speed of data transmission to 2,400 bauds. It will become the primary means of communication in operational formations in the future. Existing ultrashortwave sets are to be replaced by standardized modular equipment with improved noise immunity. Plans call for building combined shortwave/ultrashortwave communications equipment for the airplanes of naval aviation, which will make them compatible with standard marine communications equipment. A new system for communication between ships and naval aviation is being developed on a special program. A laser system is being developed for surface ships and aircraft to communicate with submarines.

Special attention is being directed to the apparatus for enciphering shortwave, ultrashortwave, and satellite communications channels. This equipment will begin to be installed on ships, submarines, and airplanes in 1979. Further plans are for the development and installation on ships of apparatus for group enciphering of all radio channels.

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COMMENTS ON THE U. S. GUANTANAMO BASE

Moscow ZARUBEZHNOYE VOYENNOYE OBOZRENIYE in Russian No 11, Nov 78 signed to press 3 Oct 78 pp 103-104

[Article by Lt Col Yu. Sedov: "The American Military Base at Guantanamo"]

[Text] Readers comrades S. S. Mikadze, V. M. Titov, Yu. P. Ugol'kov, and others have asked us to tell about the American military base at Guantanamo. The article below fulfills this request.

Military bases in Latin America play an important part in the military-strategic plans of American imperialism. They are used as an instrument of neocolonialist policy and a tool for U. S. intervention in the affairs of other countries and suppressing the national liberation movement in this region. There are more than 50 bases belonging to the United States of America in Latin America; the naval base at Guantanamo, located on the southeastern coast of socialist Cuba, is particularly important. It was established in conformity with a treaty imposed on Cuba in 1903 according to which the United States leases 116.5 square kilometers of land and 37 square kilometers of territorial waters, including Guantanamo Bay. The entire southern part of the bay and the region stretching three miles south from its mouth have been declared by the United States to be closed to navigation by the ships and vessels of other countries.

According to the foreign press, the base has a large number of military and other facilities, including 1,400 service and residential buildings, 14 weapons, ammunition, and supply depots, petroleum storage tanks, a center of the armed forces radio and television network, ship repair yards, many docks, and so on. The broad, deep, well-protected harbor and the structures and equipment located in it can accommodate and service up to 50 ships of different classes, including aircraft carriers. The waterfront has a total length of 3,000 meters with depths of 10-17 meters at the docks.

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The base has two large airfields, Livord Field with a runway of 2,400 meters and MacCallia with a runway of 1,500 meters. Air force and navy planes are stationed there.

According to a foreign press estimate, the base is operated by about 7,000 people, 2,500 of them servicemen. In addition, there are 3,000-5,000 American sailors and officers on the ships of the U. S. Second Fleet, which stands in the roadstead of the bay. During the "Caribbean crisis" in October 1962 the total number of U. S. military personnel at the base was raised to 20,000.

The Guantanamo Naval Base is used to monitor the Caribbean Sea zone and approaches to the Panama Canal and for testing new types of weapons. It is considered the most convenient base in the Atlantic and each year more than 150 ships came to work on combat training missions. The base has been a center of provocation and sabotage against the Republic of Cuba for many years.

Despite the legal and fair demand of the Cuban people for the unconditional elimination of the American military base, the Pentagon continues to hold it by force and use it for its own purposes, considering this strategic point to be a key naval installation in the Caribbean region and in Central and South America.

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